

What is claimed is:

- 1 1. A method for cutting compounded rubber for reflected light measurement of the
2 dispersion of fillers therein, comprising the steps of:
3 subjecting a sample of compounded rubber to a dynamic pulling force; and
4 cutting the sample for the purpose of analyzing, through reflected light
5 measurement, the dispersion of fillers within the sample, said cutting step occurring while
the sample is subjected to the dynamic pulling force.
- 1 2. The method for cutting compounded rubber according to claim 1, wherein the
2 sample of compounded rubber is cut in air.
- 1 3. The method for cutting compounded rubber according to claim 1, further including
2 the step of pressing a portion of the sample of compounded rubber, prior to subjecting the
3 sample to a dynamic pulling force, to free the pressed portion from entrapped air, the
subsequent cutting occurring at the pressed portion of the sample.
- 1 4. The method for cutting compounded rubber according to claim 3, wherein the
2 sample is cooled concurrently with said step of pressing.
- 1 5. The method for cutting compounded rubber according to claim 4, wherein said steps
2 of pressing, cooling, subjecting to a dynamic pulling force, and cutting may be carried out
3 in less than 4 minutes.
- 1 6. The method for cutting compounded rubber according to claim 1, wherein the
2 sample of compounded rubber contains neither curing agents nor accelerators.
- 1 7. The method for cutting compounded rubber according to claim 1, wherein the
2 dynamic pulling force is effective by pulling opposed ends of the sample away from each
3 other at a constant rate.

1 8. The method for cutting compounded rubber according to claim 1, wherein the
2 sample of compounded rubber is stained by about five to ten percent by the dynamic
3 pulling force before the cutting step begins.

1 9. A sample press for preparing a sample of compounded rubber for reflected light
2 measurement of the dispersion of fillers there, comprising:
3 a base plate;
4 a press for pressing a hot sample of compounded rubber against said base plate; and
5 a cooling element that cools said base plate so as to speed the cooling of said hot
6 sample of compounded rubber during pressing thereof.

1 10. A device for cutting compounded rubber for reflected light measurement of the
2 dispersion of fillers therein, comprising:
3 first and second clamps spaced apart across a gap for clamping a sample of
4 compounded rubber across said gap, wherein at least one of said first and second clamps
5 is capable of moving relative to the other of said first and second clamps so as to alter the
6 distance between said first and second clamps for stretching a sample of compounded
7 rubber clamped across said gap; and
8 a cutting blade disposed in said gap for advancing through a sample of compounded
9 rubber during relative movement of said first and second clamps, such that a sample of
10 compounded rubber may be cut while being subjected to a dynamic pulling force.